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AMENDMENT		Docket No. B0004/7080
Applicant:	Jochen Franzen	
Serial No:	09/778,654	
Filed:	February 7, 2001	
For:	GRIDLESS TIME-OF-FLIGHT MASS SPECTROMETER FOR ORTHOGONAL ION INJECTION	
Examiner:	M. A. El-Shammaa	
Art Unit:	2881	

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)
The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Box Non-Fee Amendment, Assistant Commissioner for Patents, Washington, D.C. 20231 on March 5, 2003.

Brenda A. Kantorski
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Assistant Commissioner for Patents
Washington, D.C. 20231

In response to the office communication dated November 29, 2002, please amend the above-identified application as follows:

Substitute Paragraphs and Claims

Please substitute for the paragraph beginning on page 2, line 12 the following:

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In the simplest case of a TOF mass spectrometer, the ions are not focused at all. Acceleration of the ions generated by MALDI or ESI is performed by one or two grids, and the slight divergence of the ion beam caused by the initial velocities of the ions perpendicular to the direction of acceleration is accepted as being tolerable. The reflector also contains grids, one or even two grids depending on the type of reflector. In addition to beam divergence due to the spread of initial velocities there is a beam divergence caused by the small-angle scatter at the openings of the grid. If the electric field strength is different on both sides of the grid, each opening in the grid will act as a weak ion lens. Divergence due to the spread of initial velocities can be reduced by